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published in
International Journal of Methods in Psychiatric Research
2013

DOI (link to publisher)
10.1002/mpr.1386

document version
Publisher's PDF, also known as Version of record

International Journal of Methods in Psychiatric Research
Int. J. Methods Psychiatr. Res. 22(2): 100–109 (2013)
Published online 16 May 2013 in Wiley Online Library
(wileyonlinelibrary.com) **DOI:** 10.1002/mpr.1386

Mental health care Monitor Older adults (MEMO): monitoring patient characteristics and outcome in Dutch mental health services for older adults

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Key words
mental health services, aged, quality of health care, outcome assessment

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Abstract

Information on which older adults attend mental health care and whether they profit from the care they receive is important for policy-makers. To assess this information in daily practice, the "Mental health care Monitor Older adults" (MEMO) was developed in the Netherlands. The aim of this paper is to describe MEMO and the older adults who attend outpatient mental health care regarding their predisposing and enabling characteristics and need for care. In MEMO all patients referred to the division of old age psychiatry of the participating mental health care organisations are assessed at baseline and monitored at 4, 8 and 12-month follow-up. Primary outcomes are mental and social functioning, consumer satisfaction, and type of treatment provided (MEMO Basic). Over the years, MEMO Basic is repeated. In each cycle, additional information on specific patient groups is added (e.g. mood disorders). Data collection is supported by a web-based system for clinicians, including direct feedback to monitor patients throughout treatment. First results at baseline showed that the majority of patients that entered the division of old age psychiatry was female (69%), had low education (83%), lived alone (53%), was depressed (42%) and had a comorbid condition (82%). It seemed that older immigrants were not sufficiently reached. The current study is the first in the Netherlands to evaluate patient characteristics and outcome in mental health care provided for older adults in day-to-day practice. If MEMO works out successfully, the method should be extended to other target groups.

Background

As in many other countries, the Dutch population is ageing (Statistics Netherlands, 2012; Cairney *et al.*, 2010). This will lead to an increase of older adults with mental health problems (Jeste *et al.*, 1999). Previous research showed that older adults underutilize mental health services (Han *et al.*, 2011; Cairney *et al.*, 2010; Klap *et al.*, 2003).

Added to this, older adults seem to be less likely to receive adequate treatment for their mental health problems compared to younger adults (Klap *et al.*, 2003; Cooper *et al.*, 2010). In view of all this, it is helpful for policy-makers to gain insight in which older adults attend mental health care and whether they profit from the care they receive.

In understanding mental health service use the model of Andersen is frequently used (Andersen and Newman, 1973). Three groups of factors are distinguished: (1) predisposing factors (such as sex and age), (2) enabling factors (such as income and social support) and (3) need factors (such as illness and disease). Previous studies showing factors that were positively associated with mental health service use in older adults were: perceived need for care, chronic physical health problems, health insurance coverage and psychopathology (Cairney *et al.*, 2010; Klap *et al.*, 2003; Mackenzie *et al.*, 2010; Geerlings *et al.*, 2005). Older adults from an ethnic minority were less likely to seek help (Mackenzie *et al.*, 2010; Neighbors *et al.*, 2008; Sorkin *et al.*, 2011; Byers *et al.*, 2012). Of the three factors from the model, need factors appeared to be the strongest predictor of service use in older adults (Cairney *et al.*, 2010; Scott *et al.*, 2010; Byers *et al.*, 2012; Mackenzie *et al.*, 2010; Li *et al.*, 2005). Monitoring quality of care, i.e. whether older adults profit from the care they receive, is more difficult since there is no overall accepted definition. Quality can be indicated by several measures of structure, process and outcome (Priebe, 2000; Srebnik *et al.*, 1997; Tansella and Thornicroft, 1998; Gaebel *et al.*, 2012). The latter seems to be the most direct indicator for quality and includes a number of widely accepted criteria such as symptomatology, consumer satisfaction, needs for care, personal and social functioning, and quality of life (Amatulli *et al.*, 2005; Priebe, 2000; Srebnik *et al.*, 1997; Thornicroft and Slade, 2000). Since the level of symptomatology forms the major focus of therapy, it is seen as the main criterion to establish success or failure of treatment in both research and clinical practice (Gilbody *et al.*, 2003). However, consumer satisfaction is also seen as an important factor in outcome measurement (Stallard, 1996; Henderson *et al.*, 1999; Ruggeri *et al.*, 2007; Lasalvia and Ruggeri, 2007). Professionals in mental health care are more positive about monitoring satisfaction than outcome (Valenstein *et al.*, 2004). Possibly because of the focus on the relationship between therapist and patient which they feel they can influence more than outcome (Valenstein *et al.*, 2004). Therefore it is important to take both level of symptomatology and consumer satisfaction into account when monitoring quality of care.

Besides defining quality of care, it is also challenging to collect outcome data in daily practice. Routine Outcome Monitoring (ROM), i.e. measuring the functioning of a patient periodically during treatment to inform both clinician and patient about progress, receives increasing attention as a way to collect outcome data in everyday practice (de Beurs and Zitman, 2007; Gilbody *et al.*, 2003; Lambert *et al.*, 2005). However, some difficulties in the implementation of ROM have been identified: clinicians feel that outcome measurement undermines their clinical expertise; lack of information among clinicians how to use outcome measures; instruments take too much time to complete and are thought to be bureaucratic; measurement of outcomes is not without costs; lack of feasible instruments; fear of how outcomes are used (Gringras *et al.*, 2006; McGrath and Tempier, 2003; Robertson *et al.*, 2006; Slade *et al.*, 1999; Meehan *et al.*, 2006; Callaly *et al.*, 2006). Some of these obstacles, like encouragement to use outcome measures and instruments take too much time to complete, could be overcome with the use of an electronic system (Clifford *et al.*, 1999; McGrath and Tempier, 2003; de Beurs and Zitman, 2007; Gringras *et al.*, 2006; Oudejans, 2009; Robertson *et al.*, 2006). Online delivery of questionnaires: simplifies the provision of clinicians' feedback on scores; no longer requires distribution of questionnaires and data entry, which smoothens the process of data collection; lowers the number of missing values because it is not possible to continue without answering all the questions (de Nooijer and de Vries, 2007).

The Mental health care Monitor Older adults (MEMO) is the first study in the Netherlands to routinely collect data in daily practice on which older adults attend outpatient mental health care and whether they profit from the care they receive throughout the country. To overcome some of the previous identified obstacles: a web-based system for data collection was developed; only instruments covering a wide range of functioning that could be administered quickly were selected; clinicians were trained at the start of MEMO how to use the instruments in daily practice and this was repeated annually; it was made clear to clinicians that only anonymized and aggregated data would be used for the study, so the results could not be reduced to individual patients or clinicians.

The aim of this article is two-fold: (1) to describe MEMO; (2) to describe the patients who attend outpatient mental health care for older adults regarding their predisposing and enabling characteristics and need for care.

Description of MEMO

Design

The MEMO is a prospective, naturalistic study aimed to monitor patient characteristics of and treatment outcome

in older patients referred to the division of old age psychiatry of 14 mental health organizations throughout the Netherlands. All patients meeting the inclusion criteria (see later) receive a baseline assessment at intake and are monitored every four months throughout treatment using similar measurements (MEMO Basic). A final post-treatment assessment is performed after concluding treatment or after 12 months in case of continued treatment. Mental health care organizations are allowed to stop inclusion after having included at least 60 patients. To aim for a representative sample, it is agreed with the organizations to include the first 60 clients that meet inclusion criteria (see "participants") since the start of MEMO.

The MEMO Basic cycle (as described earlier) is executed approximately every 18 months (six month inclusion period and final post-treatment assessment after 12 month at most), with a total of four cycles. This enables trend analyses of the quality of Dutch mental health care for older adults. Each new MEMO Basic cycle is extended with additional measurements in order to study specific patient groups in more detail, e.g. patients with mood disorders.

Participants

Each MEMO Basic cycle includes all patients referred to the outpatient clinic for old age psychiatry with any psychiatric disorder and progress to treatment after intake. In the Netherlands, the minimum age to be referred to the division for older adults varies between 60 and 65 years. Patients are monitored continuously if they progress to inpatient care. The only exclusion criteria is a primary diagnosis of a neurodegenerative disease (mainly cognitive disorders or dementia). First, neurodegenerative diseases cannot be cured and do need other, observational or proxy, monitoring instruments. Secondly, in the Netherlands, old age psychiatry is organized separately for patients suffering from neurodegenerative diseases and associated behavioural disturbances (also called psychogeriatric disorders) and other psychiatric disorders like substance use disorder, primary psychotic disorders, mood disorders, anxiety disorders, personality disorders, etc. (also called gerontopsychiatric disorders). Both groups of older patients need to be monitored in a different way: gerontopsychiatric patients can reliably respond to questionnaires themselves. For patients with dementia or other neurodegenerative disorders observational scalese may be needed. To start we chose to focus on patients with gerontopsychiatric disorders and in a later phase add ROM of patients with psychogeriatric disorders.

Setting

As MEMO is aimed to serve as a nationwide monitoring system for the quality of secondary mental health care of older adults in the Netherlands, all 41 organizations for mental health care affiliated to the Netherlands Mental Health Care Association (GGZ Nederland) were invited by letter to attend an information meeting about MEMO. A total of 25 (61%) organizations attended the meeting and of those that were interested to participate, we selected 14 organizations taking account of a representative demographical distribution in population density (Statistics Netherlands, 2011): less than 1000 inhabitants per square kilometre ($n = 5$), 1000 to 1500 inhabitants per square kilometre ($n = 4$) and 1500 or more inhabitants per square kilometre ($n = 5$). Organizations were financially supported for participation in order to compensate for the availability of a research assistant (see paragraph "data collection").

Outcome measures

Primary outcome measures

The primary outcome parameters in MEMO Basic are mental and social functioning and consumer satisfaction. In order to maximize feasibility, only instruments covering a wide range of functioning that could be administered quickly were selected.

Mental and social functioning will be measured with the Dutch version of the Health of the Nation Outcome Scales 65+ (HoNOS 65+) (Burns *et al.*, 1999; Staring *et al.*, 2003). The HoNOS 65+ is a 12-item observation scale that can be filled out by a clinician in less than 10 minutes. The HoNOS 65+ is developed to evaluate the outcome of treatment for older adults with respect to both social and mental functioning irrespective of the type of psychiatric diagnosis. The 12 scales include behavioural disturbance, non-accidental self injury, problem drinking or drug use, cognitive problems, problems related to physical illness or disability, problems associated with hallucinations and/or delusions, problems associated with depressive symptoms, other mental and behavioural problems, problems with social or supportive relationships, problems with activities of daily living, overall problems with living conditions, problems with work and leisure activities – quality of daytime environment. Response categories, ranging from zero to four, were "no problem", "minor problem that is non-clinical: i.e. would not normally lead to intervention", "mild problem (that would justify intervention)", "moderate problem", and "severe problem". The total score ranges from 0 through 48 and represents overall severity of psychopathology, with higher scores

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indicating more problems. Earlier research has shown good psychometric properties in older populations (Burns *et al.*, 1999; Spear *et al.*, 2002).

Before data collection, all clinicians were trained by MV in order to administer the HoNOS 65+ reliably. During the project, booster sessions were given annually for all clinicians.

Consumer satisfaction is measured with the self-report Dutch Mental Health Care Client thermometer (GGZ Cliëntenthermometer) (Kok and Mulder, 2005). This questionnaire measures consumer satisfaction with mental health care in four domains: appreciation of information, appreciation of joint decision-making, appreciation of clinician, and appreciation of outcome. The results indicate strengths and weaknesses of the care provided. This instrument is already being used in mental health services throughout the Netherlands and enables benchmarking (Kok, 2003). Earlier research showed that psychometric properties of the Mental Health Care Client thermometer are acceptable in older adults (Kertzman *et al.*, 2002a, 2002b). The instrument was less valid in specific subgroups, like older adults with dementia and inpatients, but it can be used reliably in the majority of patients included in MEMO (Kertzman *et al.*, 2002a, 2002b).

Type of treatment is measured with a questionnaire consisting of types of treatment that need to be registered for reimbursement in the Netherlands: individual psychological or psychotherapeutic treatment, psychological or psychotherapeutic treatment in a group, relation or system therapy, Electric-Convulsive Therapy (ECT), activating techniques, individual supportive counselling, supportive counselling of the system, pharmaceutical treatment, and finally, inpatient care.

Confounding or modifying variables

MEMO assesses the following variables that may act as modifying factors: socio-demographic variables (sex, age, nationality, living arrangements, highest education attained), somatic comorbidty (classified in no, one or two or more comorbid conditions), and critical life events during the period of treatment. Life events (for example loss of spouse, financial problems, having moved homes, chronic illness, etc.) were measured by a slightly adapted version of the life events list used in the Longitudinal Ageing Study Amsterdam (de Beurs *et al.*, 2001; Longitudinal Ageing Study Amsterdam, 2011)

Procedure

At intake all patients are informed about MEMO by a brochure. Before the start of treatment the patients' demographic variables and psychiatric diagnosis (all DSM-IV axis) are registered by the clinician. The clinician fills out the HoNOS 65+ at baseline and every follow-up assessment (every four months) up till the end of treatment or up till 12-month follow-up. Furthermore, the clinician registers the type of treatment and life events occurring between the assessments. This way clinicians are periodically informed about the course and severity of symptoms during treatment. The patient only fills out the Dutch Mental Health Care Client thermometer at post-treatment to measure consumer satisfaction. MEMO does not impose any restrictions on the type and/or duration of treatment in order to monitor the "naturalistic" course of late-life mental disorders treated in secondary care.

In case of additional measurements for specific disorders (see later) self-report questionnaire filled out by patients or observer rated questionnaire filled out by clinicians can be added at the monitoring system at baseline and all follow-up assessments.

MEMO Depression

As the MEMO Basic cycle will be started at least four times, we have the opportunity to add additional measurements each cycle for specific subgroups of patients like those with mood disorders, anxiety disorders, or personality disorders. During the first two cycles, we have chosen to examine all patients with a primary mood disorder in more detail (MEMO Depression). Mood disorders are among the most prevalent disorders amongst older adults with prevalence rates for major depressive disorder about 2% and minor depressive disorder about 10% in community-dwelling older adults (Beekman *et al.*, 1999). Moreover, depression occupies fourth place in the ranking of diseases with highest Disability-Adjusted Life Years (DALYs) in the general population in the Netherlands (National Institute for Public Health and the Environment, 2011). DALYs is a measure for the total amount of health that is lost due to a disease.

For MEMO Depression, patients with the following primary DSM-IV diagnosis have to fill out an additional questionnaire: 291.89 (alcohol-induced mood disorder), 292.84 [substance (amphetamine, cocaine, hallucinogen, inhalant, opioid, phencyclidine, sedative*, other (or unknown)-induced mood disorder], 293.83 (mood disorder due to general medical condition), 296.2× (major depressive disorder single episode), 296.3× (major depressive disorder recurrent), 296.90 (mood disorder NOS), 300.4 (dysthymic disorder), 309.0 (adjustment disorder with depressed mood).

Eligible patients will be asked to fill out the shortened Geriatric Depression Scales-15 item version (GDS-15) at baseline at all follow-up assessments (Figure 1) (Sheikh and Yesavage, 1986). The GDS has originally been developed as a screening tool, but has also been found to be a valid and reliable instrument to monitor treatment effects (Kok, 2008; Smalbrugge *et al.*, 2008). The GDS-15 does not have somatic items interfering with (highly prevalent) somatic illnesses at older age, is easy to administer (all items have to be rated as "yes" or "no"), and does have similar psychometric properties compared to the original 30-item version.

Data collection

To enhance data collection a web-based computer system has been developed accessible from every computer with an Internet connection. Confidentiality is ensured by a login procedure and a separated environment for each organization preventing exchange of patient data between organizations. Directly after data entry, the system generates a graphic visualizing the progress of the patient and thereby giving feedback to the clinician. In case clinicians prefer to use paper and pencil forms, feedback will be delayed till the moment the research assistant has entered the data into the system.

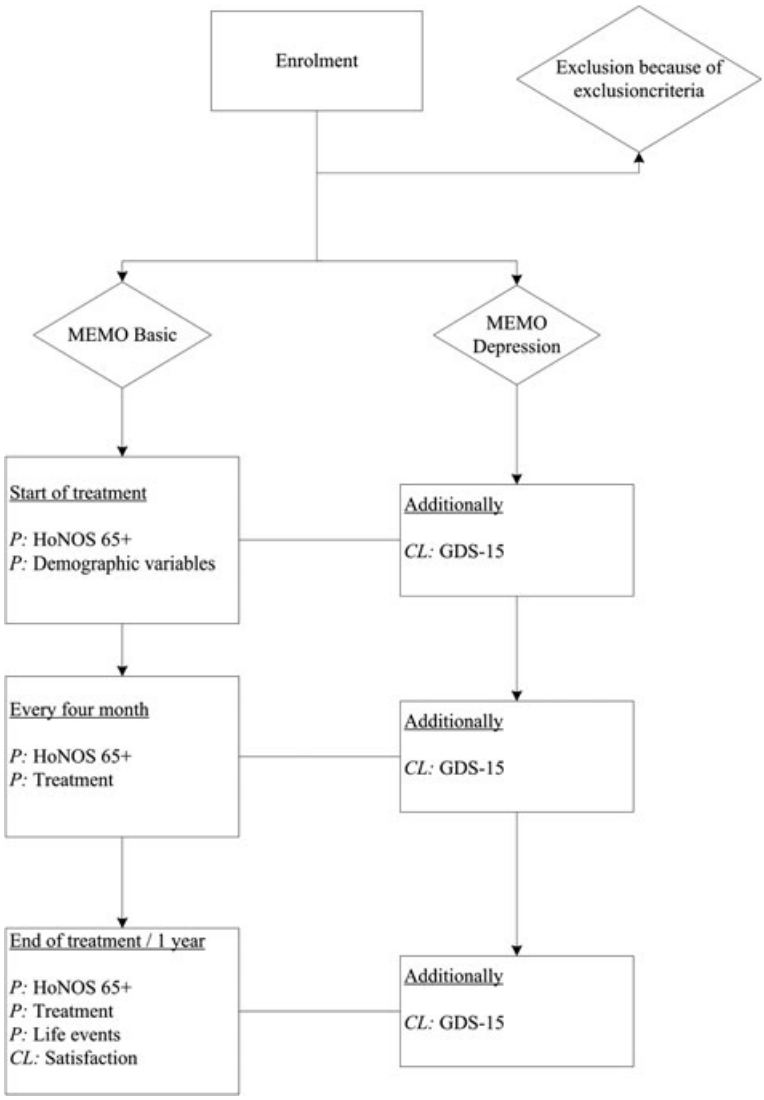

Figure 1. Measurement overview per time (enrolment, every four months and 12 months/end of treatment) and group (MEMO Basic and MEMO Depression). P, filled out by professional; CL, filled out by client.

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Patients will fill out their questionnaires on a form in any case, to facilitate patients who are not used to working on a computer. The research assistant will then enter these data into the system. This research assistant, a secretary or psycho-diagnostic assistant, is designated by each participating organization before the start of data collection and fully instructed by MV.

When a patient is added, the system itself decides which questionnaires have to be filled out (e.g. only the basic questionnaires or also additional questionnaire based on the primary diagnosis). The monitoring software is flexible so that changes in the additional questionnaires for specific disorders can be made.

During follow-up, the system tracks every patient and signals every four months up till 12 months when new questionnaires should be completed by weekly e-mail alerts to both clinicians and research assistants.

Ethical considerations

Only the professionals of the mental health care organizations participating in MEMO have full access to the system and can link patient numbers used for analyses to more personal information. Patient names will be stored in the system for the duration of the data collection and will then be removed.

Researchers at the coordinating centre periodically receive anonymous data based on patient numbers. As patients are neither subjected to interventions nor had to obey behavioural rules for MEMO, the medical-ethics committee METiGG decided that the "Medical Research Involving Human Subjects Act" is not applicable and the study does not require ethical approval. Nevertheless, to inform patients, clinicians will provide a brochure on MEMO. If patients do not agree with the use of their anonymous data for scientific research, they will not be added into the system.

Methods

To gain insight in which older adults attend mental health care data collected at pre-measurement during the first MEMO-cycle were use. Age, gender, nationality and level of education were labelled as predisposing factors. Enabling factor was living arrangement. Need factors included primary diagnosis and comorbid disorders on axis I to axis III according to the DSM-IV and the total score of HoNOS 65+. Descriptive statistics were calculated using SPSS 15.0.

Results

In the first MEMO-cycle 836 patients are included. There is a variation between participating organizations in the number of patients they included (Table 1). The majority of patients is female, has a low education, has Dutch nationality and lives alone. Compared to the general population of older adults in the Netherlands, persons who attend care are relatively old, more often female and more often single. Regarding the DSM-IV diagnosis, most patients have a depressive disorder (42%), adjustment disorder (22%) or anxiety disorder (11%) as the primary diagnosis. Amongst patients with a comorbid disorder on axis I anxiety disorders (28%), depressive disorders (25%) and relational problems (19%) are most frequent. Amongst patients with a comorbid personality disorder on axis II (20%) a personality disorder not otherwise specified (20%) and traits of a dependent personality disorder (20%) are most prevalent. Seventy per cent of the patients have one or more physical illnesses that could influence the treatment of their psychiatric problems. Problems with the primary support group (73%), problems related to the social environment (27%) and housing problems (7%) are the psychosocial and environmental factors that are frequently diagnosed on axis IV. Patients have a rather low Global Assessment of Functioning-score at intake (axis V).

Discussion

In this paper we have described the design of the MEMO. MEMO provides insight in patient characteristics of older adults attending mental health care and whether they profit from the care they receive. Results of the first MEMO-cycle at baseline showed that the majority of older adults that entered the division of old age psychiatry were female, had low education, lived alone and had Dutch nationality. When compared to the general population of older adults in the Netherlands, older adults who received secondary mental health care were relatively more often female, older and single. Research among community-dwelling older adults with mood and anxiety disorders also showed that the odds of receiving mental health care were higher when older adults were not married nor cohabited (Byers *et al.*, 2012). On the contrary, other research amongst community-dwelling older adults with serious psychological distress showed that the receipt of mental health services was more likely among those who were married, as it was for women and those who were highly educated (Han *et al.*, 2011). Since almost all patients had Dutch nationality it seems that, in line with other research, older immigrants with psychiatric problems were not

Table 1. Description of patients that entered the division of old age psychiatry in the first MEMO-cycle. If possible, comparison with the general population of older adults (65 years or older) in the Netherlands is made

		MEMO ($N = 836$)	Statistics Netherlands[1]
Age in years	mean (SD)	75.7 (7.94)	
< 65 years	*n* (%)	61 (7.4)	
65–74 years	*n* (%)	341 (41.5)	(54.7)
75–84 years	*n* (%)	305 (37.1)	(33.8)
≥ 85 years	*n* (%)	115 (14.0)	(11.5)
Female sex	*n* (%)	575 (68.8)	(56.6)
Level of education			
No education/primary school	*n* (%)	293 (35.0)	
Secondary education	*n* (%)	402 (48.1)	
High education	*n* (%)	103 (12.3)	
Living arrangement			
Alone	*n* (%)	405 (53.1)	(49.8)
With partner	*n* (%)	342 (44.8)	(49.8)
With others	*n* (%)	16 (2.1)	(0.4)
Nationality			
Dutch	*n* (%)	807 (96.5)	(87.8)
Western immigrant	*n* (%)	5 (0.6)	(9.5)
Non-Western immigrant	*n* (%)	9 (1.1)	(2.7)
Primary diagnosis			
Depressive disorder	*n* (%)	354 (42.3)	
Adjustment disorder	*n* (%)	183 (21.9)	
Anxiety disorder	*n* (%)	94 (11.2)	
Schizophrenia and other psychotic disorders	*n* (%)	36 (4.3)	
Bipolar disorder	*n* (%)	24 (2.9)	
Personality disorder	*n* (%)	16 (1.9)	
Substance abuse	*n* (%)	15 (1.8)	
Other	*n* (%)	114 (13.7)	
Comorbid disorder on axis I			
No disorder	*n* (%)	594 (71.1)	
Single disorder	*n* (%)	153 (18.3)	
≥ 2 disorders	*n* (%)	89 (10.6)	
Comorbid disorder on axis II			
No disorder	*n* (%)	669 (80.0)	
Single disorder	*n* (%)	146 (17.5)	
≥ 2 disorders	*n* (%)	21 (2.5)	
Comorbid disorder on axis III			
No disorder	*n* (%)	250 (29.9)	
Single disorder	*n* (%)	356 (42.6)	
≥ 2 disorders	*n* (%)	230 (27.5)	
Diagnose on axis IV			
No problem	*n* (%)	154 (18.4)	
Single problem	*n* (%)	568 (67.9)	
≥ 2 problems	*n* (%)	114 (13.7)	
Score on axis V (intake)			
≤ 50	*n* (%)	259 (31.0)	
51–60	*n* (%)	350 (41.9)	
≥ 61	*n* (%)	226 (27.0)	
Score on HoNOS 65+ (intake)	mean (SD)	10.96 (5.35)	

[1]Statistics Netherlands, 2011.

Organization – A: $N = 156$; B: $N = 88$; C: $N = 81$; D: $N = 79$; E: $N = 65$; F: $N = 62$; G: $N = 62$; H: $N = 60$; I: $N = 55$; J: $N = 55$; K: $N = 53$; L: $N = 9$; M: $N = 6$; N: $N = 5$.

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sufficiently reached (Sorkin *et al.*, 2009, 2011; Neighbors *et al.*, 2008). This could be due to cultural barriers, such as stigma and denial (Sorkin *et al.*, 2011; Cohen *et al.*, 2005). According to the DSM-IV diagnosis, the majority of patients had a primary diagnosis of depression (42%), adjustment disorder (22%) or anxiety disorder (11%). Psychiatric (30%) and somatic (70%) comorbidity rates were high. Although population screening showed higher prevalence rates of anxiety disorders than depressive disorders in older adults (Beekman *et al.*, 1999), in line with previous research we found the latter to be more prevalent in secondary mental health care (Depla *et al.*, 2005; de Beurs *et al.*, 1999; Scott *et al.*, 2010). The high levels of somatic comorbidity also correspond with previous research where chronic physical health problems increased the likelihood of service use in older adults (Klap *et al.*, 2003), although other research could not confirm this (Cairney *et al.*, 2010). The presence of physical illness ask for caution in the prescription of psychotropic medication (Schuurmans *et al.*, 2008). Future results of MEMO on outcome will add to the literature in a number of ways. Because MEMO takes place in the natural environment of mental health care, the results will evaluate outcome of treatment in day-to-day practice. MEMO will focus on mental health care for older adults, a target group that has not received any attention in research on routine outcome monitoring. Besides the level of symptomatology, MEMO also takes consumer satisfaction into account, which has not been the case in other studies of routine outcome monitoring. The study will also be informative providing online delivery of questionnaires enabling direct feedback to clinicians in routine daily practice, facilitating regular outcome measurement in mental health care organizations throughout the country.

The current study is not a Randomized Controlled Trial (RCT) and therefore will not provide effectiveness or efficacy data for specific interventions (Zwanepol and de Groot, 2008). However, systematically collected data will offer the unique opportunity to identify prognostic factors in a natural setting with better generalizibility compared to predictors of treatment outcome derived from RCTs. So far, a limitation of MEMO is clearly that it is only focused on patients with gerontopsychiatric disorders. In the near future we hope to extent MEMO to teams working with psychogeriatric disorders. As only general information about the type of treatment is collected, it is not possible to evaluate whether organizations use guidelines or "best practices" in their treatment for older adults. Patients are monitored for a maximum of a year, although their treatment may still be ongoing at that time. However, after one year the effects of treatment should be visible, and this way the burden of measurements on patients as well as clinicians will remain acceptable. Besides, clinicians will be more motivated when they know the monitoring does not continue indefinitely. Finally, there is a variation between participating organizations in number of included patients. This shows that the implementation of MEMO needs ongoing support. However, the fact that several organizations did include a large number of patients in a short amount of time shows that MEMO is workable.

MEMO gives insight in daily practice to who attends outpatient mental health care for older adults and whether patients improve from the care they receive. Results on the former topic implicate that immigrants were not sufficiently reached by outpatient mental health care. If MEMO appears to be successful, the method should be extended to other target groups for example adolescents.

Acknowledgements

This study is financed by the Ministry of Health, Welfare and Sport. We are grateful for this financial assistance in enabling MEMO.

Declaration of interest statement

The authors have no competing interests.

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